

What is claimed is:

1 1. A semiconductor packaging structure,
2 comprising:

3 a chip having an active surface and an opposing non-
4 active surface, wherein the active surface
5 consists of a central area and a peripheral
6 area having a plurality of bonding pads;

7 a lead frame comprising a plurality of the leads, a
8 plurality of tie bars, and a chip paddle, the
9 tie bars connecting to the chip paddle and
10 attached to the active surface of the chip in
11 such a way as to avoid contact with the bonding
12 pads; and

13 a plurality of wires electrically connecting the
14 bonding pad and the leads.

1 2. The structure as claimed in claim 1, further
2 comprising an encapsulation covering the chip, the
3 bonding pads, the chip paddle, the leads, and the wires.

1 3. The structure as claimed in claim 1, wherein
2 the chip paddle and the active surface of the chip are
3 connected by non-conductive solid or liquid glue.

1 4. A semiconductor packaging structure,
2 comprising:

3 a chip having an active surface and an opposing non-
4 active surface, wherein the active surface
5 consists of a central area and a peripheral
6 area having a plurality of bonding pads;

7 a lead frame comprising a plurality of the leads, a
8 plurality of tie bars, and a chip paddle, the
9 tie bars connecting to the chip paddle and
10 attached to the active surface of the chip in
11 such a way as to avoid contact with the bonding
12 pads, and each of the leads comprising a wire-
13 connecting surface and a wire non-connecting
14 surface;

15 a plurality of wires electrically connecting with
16 the bonding pad and the wire-connecting surface
17 of the leads; and

18 an encapsulation covering the active surface of the
19 chip, the bonding pads, the chip paddle, the
20 wire-connecting surface of the leads, and the
21 wires, such that the opposing non-active
22 surface of the chip and the wire non-connecting
23 surface of the leads are thereby exposed.

1 5. The structure as claimed in claim 4, wherein
2 the leads further comprise a plurality of inner leads and
3 outer leads covered by the encapsulation and outer leads
4 extending beyond the encapsulation.

1 6. The structure as claimed in claim 4, wherein
2 the chip paddle and the active surface of the chip are
3 connected by non-conductive solid or liquid glue.

1 7. A semiconductor packaging structure,
2 comprising:

3 a chip having an active surface and an opposing non-
4 active surface, wherein the active surface

5 consists of a central area and a peripheral
6 area having a plurality of bonding pads;
7 a lead frame comprising a plurality of the leads, a
8 plurality of tie bars, and a chip paddle having
9 an adhering surface and a opposing non-adhering
10 surface, the adhering surface is connected with
11 the central area, the tie bars connecting to
12 the chip paddle and attached to the active
13 surface of the chip in such a way as to avoid
14 contact with the bonding pads, and each of the
15 leads comprising a wire-connecting surface and
16 a wire non-connecting surface;
17 a plurality of wires electrically connecting with
18 the bonding pad and the wire-connecting surface
19 of the leads; and
20 an encapsulation covering the active surface of the
21 chip, the bonding pads, the adhering surface of
22 the chip paddle, and the wire-connecting
23 surface of the lead, and the wires, , such that
24 the opposing non-active surface of the chip,
25 the opposing non-adhering surface of the chip
26 paddle and the wire non-connecting surface of
27 the lead thereby exposed.

1 8. The structure as claimed in claim 7, wherein
2 the leads further comprise a plurality of inner leads
3 covered by the encapsulation and outer leads extending
4 beyond the encapsulation.

Client's ref.: P900464

File: 0389-7335USf /Felicia/dwwang/ Kevin

1 9. The structure as claimed in claim 7, wherein
2 the chip paddle and the active surface of the chip are
3 connected by non-conductive solid or liquid glue.